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10/624,987	07/22/2003	Christopher Hofmeister	390/P011010-US (PAR)	8171				
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 02/09/2009		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>ADAMS, GREGORY W</td></tr></table>		EXAMINER	ADAMS, GREGORY W		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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4 UNITED STATES PATENT AND TRADEMARK OFFICE  
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6  
7 BEFORE THE BOARD OF PATENT APPEALS  
8 AND INTERFERENCES  
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10  
11 *Ex parte* CHRISTOPHER HOFMEISTER and ROBERT T. CAVENEY  
12

13  
14 Appeal 2008-1263  
15 Application 10/624,987  
16 Technology Center 3600  
17

18  
19 Decided:<sup>1</sup> February 6, 2009  
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21  
22 *Before:* WILLIAM F. PATE, III, JENNIFER D. BAHR, and  
23 FRED A. SILVERBERG, *Administrative Patent Judges*.  
24

25 SILVERBERG, *Administrative Patent Judge*.  
26

27  
28 DECISION ON APPEAL  
29

30 STATEMENT OF THE CASE

31 Appellants appeal under 35 U.S.C. § 134 (2002) from a Final Office  
32 Action of claims 1-38 and 40-42. We have jurisdiction under 35 U.S.C.  
33 § 6(b) (2002).

<sup>1</sup> The two month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

SUMMARY OF DECISION

We AFFIRM-IN-PART.

THE INVENTION

The Appellants' claimed invention is directed to a substrate processing apparatus with chambers interconnected in a Cartesian arrangement (Spec.1:7-10). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A substrate processing apparatus comprising:
  - a transport chamber capable of holding an isolated atmosphere isolated from atmosphere exterior to the transport chamber;
    - at least one substrate holding module for holding a substrate, the at least one holding module being communicably connected to the transport chamber for allowing transfer of the substrate between the at least one holding module and transport chamber;
    - a transport vehicle movably mounted in the transport chamber, the vehicle having a base and a substrate transfer arm that is movably jointed and movably mounted to the base; and
    - another module capable of holding the substrate and communicably connected to the transport chamber for transferring the substrate therebetween,
  - wherein the transport chamber defines a linear travel slot for the vehicle, the at least one holding module being located on one side of the slot, and the arm having articulation for moving a substrate to opposite sides of the slot allowing the other module to be selectably connected to the transport chamber on either side of the slot, wherein the transport vehicle can effect transfer of

the substrate between the transport chamber and both the  
at least one holding module and the other module.

#### THE REJECTIONS

The Examiner relies upon the following as evidence of  
unpatentability:

Mori	US 5,641,054	Jun. 24, 1997
Harada	US 5,700,127	Dec. 23, 1997
Hayashi	US 2002/0044860 A1	Apr. 18, 2002
Tepman	US 2002/0061248 A1	May 23, 2002
Mizokawa	US 2002/0150448 A1	Oct. 17, 2002

The following rejections are before us for review:

1. Claims 1, 10, 14 and 16 are rejected under 35 U.S.C. § 112 (1975),  
second paragraph, as being indefinite for failing to particularly point  
out and distinctly claim the subject matter which applicants regard as  
the invention.<sup>2</sup>
2. Claims 1, 5-10, 13, 15-20,<sup>3</sup> 22-38 and 40-42 is rejected under 35  
U.S.C. § 102(e) (2002) as being as being anticipated by Mizokawa.

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<sup>2</sup> The Final Office Action mailed April 5, 2005, included a rejection under 35 U.S.C. § 112. The 35 U.S.C. § 112 rejection was not set forth in the Grounds of Rejection section of the Examiner's Answer (Ans. 3). The 35 U.S.C. § 112 rejection was argued by both the Appellants (Br. 8) and the Examiner (Ans. 9). The 35 U.S.C. § 112 rejection of those claims pending in this application has been treated in this Decision On Appeal.

<sup>3</sup> Further, the Grounds of Rejection section of the Examiner's Answer (Ans. 3) stated that claim 21 was rejected under 35 U.S.C. § 102, that is, claim 21 was incorrectly grouped ("15-38") with the claims being rejected under 35 U.S.C. § 102. The Final Office Action mailed April 5, 2005, only contained a rejection of claim 21 under 35 U.S.C. § 103(a). Accordingly, claim 21 has been so treated in this Decision On Appeal.

3. Claims 2-4 are rejected under 35 U.S.C. § 103(a) (2004) as being unpatentable over Mizokawa in view of Harada.

4. Claims 11, 12, 14 and 21 are rejected under 35 U.S.C. § 103(a) (2004) as being unpatentable over Mizokawa in view of Tepman.

## ISSUES

The issues before us are whether the Appellants have shown that the Examiner erred in rejecting claims 1, 10, 14 and 16 as being indefinite; claims 1, 5-10, 13, 15-20, 22-38 and 40-42 over Mizokawa; claims 2-4 over Mizokawa in view of Harada; and claims 11, 12, 14 and 21 over Mizokawa in view of Tepman. These issues turn on whether: (1) Mizokawa discloses a transport chamber capable of holding an isolated atmosphere isolated from atmosphere exterior to the transport chamber as called for in claims 1 and 10; (2) Mizokawa discloses a chamber having at least one of a minimum chamber width, or a minimum substrate transfer opening width for a given reach of the substrate transfer arm as called for in claim 10; (3) Mizokawa discloses how the transfer arm is moved as called for in claims 9 and 17; (4) Mizokawa discloses the particular vehicle path as called for in claim 20; and (5) Mizokawa discloses the particular shape of the vehicle as called for in claim 40.

## FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

- 1        1.    The Appellants' Specification discloses a substrate processing  
2            apparatus (10 and 10') comprising a transport chamber (18, 18A,  
3            18B and 602-626) capable of holding an isolated atmosphere  
4            isolated from atmosphere exterior to the transport chamber  
5            (Spec.11:3-6; Spec.12:14-18; and Spec.23:10-20), at least one  
6            substrate holding module (20 and 630-652) for holding a substrate  
7            (figs. 2-7A), a transport vehicle (22, 122A, 122B and 406)  
8            movably mounted in the transport chamber, the vehicle having a  
9            base (156) and a substrate transfer arm (22A, 158 and 160) that is  
10          movably jointed and movably mounted to the base, another module  
11          (20 and 630-652) capable of holding the substrate and  
12          communicably connected to the transport chamber, wherein the  
13          transport chamber defines a linear travel slot (18A and 18B) for the  
14          vehicle.
- 15       2.    The Appellants' Specification further discloses that a linear motor  
16            (30) is connected to the transfer arm for rotating the arm relative to  
17            the base and articulating the arm in opposite directions (Spec.14:3-  
18            25).
- 19       3.    The Appellants' Specification still further discloses that the  
20            transport chamber has at least one of a minimum chamber width or  
21            a minimum substrate transfer opening width for a given reach of  
22            the substrate transfer arm (Spec.40:7-17).
- 23       4.    The Appellants' Specification still further discloses multiple  
24            vehicles (406 and 700) extending from one wall across to an  
25            opposite wall, wherein the vehicles are capable of moving past one

- 1 another (Spec.25:28-Spec.26:4 and Spec.32:19-33) (figs. 11B,  
2 13B).
- 3 5. Mizokawa discloses a substrate processing apparatus comprising a  
4 transport chamber (14) capable of holding an isolated atmosphere  
5 isolated from atmosphere exterior to the transport chamber (paras.  
6 [0032] and [0047]), at least one substrate holding module (A-Z) for  
7 holding a substrate (figs. 3, 7 and 9), a transport vehicle (12)  
8 movably mounted in the transport chamber, the vehicle having a  
9 base and a substrate transfer arm (45, 45a and fig. 4) that is  
10 movably jointed and movably mounted to the base, and another  
11 module (A-Z) capable of holding the substrate and communicably  
12 connected to the transport chamber, wherein the transport chamber  
13 (14) defines a linear travel slot for the vehicle.
- 14 6. Mizokawa further discloses a linear motor for moving the vehicle  
15 (para. [0033]).
- 16 7. Mizokawa still further discloses multiple vehicles (12AM and  
17 12NZ) movable in the transport chamber by a linear motor (para.  
18 [0057] and fig. 9).
- 19 8. Harada discloses a substrate processing system (1) having a  
20 cassette supply (6), a transfer arm (415), substrate processing  
21 chambers (481 and 482) and multiple load lock chambers (483-  
22 485) (col. 15-, l. 28-col. 16, l.46; and fig. 11).
- 23 9. Tepman discloses a semiconductor wafer processing system (100)  
24 having a transfer chamber (110), processing chambers (112 a-c),  
25 robots (transfer arms) (114 and 116), a load lock chamber (230)  
26 having an opening (238), wherein the opening is closed by a door

(292) to provide a vacuum sealing of the load lock chamber  
(230)(para. [0027], and figs. 1 and 2).

10. The ordinary meaning of the word “isolate” is to “set apart from  
others.” *Merriam-Webster’s Collegiate Dictionary* (10<sup>th</sup> ed. 1996).

11. *Merriam-Webster’s Collegiate Dictionary* (10<sup>th</sup> ed. 1996) defines  
the term “clean room” as “a room for the manufacture or assembly  
of objects (for precision parts) that is maintained at a high level of  
cleanliness by special means.”

#### PRINCIPLES OF LAW

Appellant has the burden on appeal to the Board to demonstrate error  
in the Examiner’s position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir.  
2006) (“On appeal to the Board, an applicant can overcome a rejection  
[under § 103] by showing insufficient evidence of *prima facie* obviousness  
or by rebutting the *prima facie* case with evidence of secondary indicia of  
nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir.  
1998)).

The test for definiteness under 35 U.S.C. § 112, second paragraph, is  
whether “those skilled in the art would understand what is claimed when the  
claim is read in light of the specification.” *Orthokinetics, Inc. v. Safety  
Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations  
omitted).

Definiteness problems often arise when words of  
degree are used in a claim. That some claim  
language may not be precise, however, does not  
automatically render a claim invalid. When a word  
of degree is used the [factfinder] must determine  
whether the patent’s specification provides some



standard for measuring that degree. The [factfinder] must decide, that is, whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification.

*Seattle Box Co. v. Indust. Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984) (affirming the trial court's determination that an expert would know the limitations of the claims because the Specification clearly sets forth a standard for measuring the degree used in the claim language). Even if a person of ordinary skill would need to experiment so as to determine the limits of a patent's claims, the claims would not be invalid under section 112. *See, e.g., W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1557 (Fed. Cir. 1983).

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

1 invention was made to a person having ordinary skill in the art to which said  
2 subject matter pertains.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398  
3 (2007); 127 S. Ct. 1727, 1734 (2007). The question of obviousness is  
4 resolved on the basis of underlying factual determinations including (1) the  
5 scope and content of the prior art, (2) any differences between the claimed  
6 subject matter and the prior art, (3) the level of skill in the art, and (4) where  
7 in evidence, so-called secondary considerations. *Graham v. John Deere Co.*,  
8 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 (“While the  
9 sequence of these questions might be reordered in any particular case, the  
10 [*Graham*] factors continue to define the inquiry that controls.”)

11 When construing claim terminology in the United States Patent and  
12 Trademark Office, claims are to be given their broadest reasonable  
13 interpretation consistent with the Specification, reading claim language in  
14 light of the Specification as it would be interpreted by one of ordinary skill  
15 in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir.  
16 2004).

## 17 ANALYSIS

18  
19 *35 U.S.C. § 112, Second Paragraph Rejection.*  
20

21 The Examiner’s basis for rejecting claims 1, 10, 14 and 16 under 35  
22 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly  
23 point out and distinctly claim the subject matter which applicants regard as  
24 the invention are that it was unclear whether the “at least one holding  
25 module” (cl. 1, l. 19) refers to “a substrate holding module” (l. 6) or “another  
26 module capable of holding the substrate” (l. 10); whether “reach” (cl. 10, ll.  
27 20 and 26) refers to the reach of a transport vehicle base (l. 20) or the reach

1 of a transport vehicle transfer arm (l. 19); whether “other module” (cl. 14, l.  
2 3) references “one processing module” (cl. 10, l. 6) or “another module” (cl.  
3 10, l. 12). Further, the Examiner stated that there was no antecedent basis  
4 for the limitation “the first chamber” as called for in claim 16, line 4. (Final  
5 Office Action p. 2).

6 Regarding claims 1, 10 and 14, Appellants argue that the claims are  
7 definite under 35 U.S.C. § 112, second paragraph (Br. 8-10) since it is  
8 clearly set forth in the claims which limitation is being referred to by “the at  
9 least one holding module” as called for claim 1, “a reach” as called for in  
10 claim 10, and by “the other module” as called for in claim 14. We agree  
11 with Appellants (Br. 8-10) and find that in claim 1, it is clear that the  
12 limitation “the at least one holding module” (cl. 1, 14, Br. 22) refers to the  
13 limitation “at least one substrate holding module” (cl. 1, l. 5, Br. 22); in  
14 claim 10, it is clear that the limitation “a reach” (cl. 10, l. 20, Br. 24) refers  
15 to the limitation “a jointed substrate transfer arm” (cl. 10, l. 19, Br. 24) and  
16 in claim 14, it is clear that the limitation “the other module” (cl. 14, l. 3, Br.  
17 25) refers to the limitation “another module” (cl. 10, l. 12, Br. 24).

18 Regarding claim 14, we additionally find that claim 10, line 23 (Br. 24) calls  
19 for the limitation “the other module.” Therefore, the antecedent basis for the  
20 limitation “the other module” as called for in claim 14, line 3 is “the other  
21 module” as called for in claim 10, line 23 (Br. 24). Further, claim 10, lines  
22 22 and 23 (Br. 24) call for the limitations “the at least one processing  
23 module” and “the other module” as two separate elements. We conclude  
24 that the Examiner erred in rejecting claims 1, 10 and 14 under 35 U.S.C. §  
25 112, second paragraph. Therefore, we reverse the rejection of claims 1, 10  
26 and 14 under 35 U.S.C. § 112.

Regarding claim 16, Appellants state that an amendment has been submitted to overcome the rejection under 35 U.S.C. § 112 (Br. 10). We agree with the Examiner's analysis (Ans. 10) that since the amendment to claim 16 was not entered the rejection of claim 16 stands and that there is no antecedent basis in either claims 10 and 16 for the limitation "the first chamber" as called for in claim 16, line 4 (Br. 25). Therefore, we affirm the rejection of claim 16 under 35 U.S.C. § 112.

*Prior Art Rejection.*

Mizokawa discloses a substrate processing apparatus comprising a transport chamber (14) capable of holding an isolated atmosphere isolated from atmosphere exterior to the transport chamber (paras. [0032] and [0047]), at least one substrate holding module (A-Z) for holding a substrate (figs. 3, 7 and 9), a transport vehicle (12) movably mounted in the transport chamber, the vehicle having a base and a substrate transfer arm (45, 45a and fig. 4) that is movably jointed and movably mounted to the base, another module (A-Z) capable of holding the substrate and communicably connected to the transport chamber, wherein the transport chamber (14) defines a linear travel slot for the vehicle (Fact 5).

*Rejection of claims 1, 5-8, 10, 13, 15, 16 under 35 U.S.C. 102(e) as being as being anticipated by Mizokawa; claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Mizokawa in view of Harada; and claims 11, 12 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Mizokawa in view of Tepman.*

Appellants state that Mizokawa discloses that chamber 14 is a clean room, wherein the atmosphere inside chamber 14 communicates with the outside atmosphere through vents. Therefore, Appellants contend that Mizokawa fails to disclose a chamber capable of holding an isolated atmosphere that is isolated from an atmosphere exterior to the chamber as called for in claims 1 and 10 (Br. 11). When construing claim terminology in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. (See *In re Am. Acad. of Sci. Tech. Ctr.*) The ordinary meaning of the word “isolate” is to “set apart from others.” *Merriam-Webster’s Collegiate Dictionary* (10th ed. 1996) (Fact 10). *Merriam-Webster’s Collegiate Dictionary* (10<sup>th</sup> ed. 1996) defines the term “clean room” as “a room for the manufacture or assembly of objects (for precision parts) that is maintained at a high level of cleanliness by special means” (Fact 11). Mizokawa’s discloses that chamber 14 is a clean room that has a higher cleanliness than the outside (para. [0032]). Therefore, the chamber 14 has an atmosphere that is different than the outside atmosphere. Since the atmosphere in chamber 14 is different from the outside atmosphere, and since it is in a location that is different from the outside atmosphere, the atmosphere in chamber 14 is considered to be set apart from the outside atmosphere and is, thus, isolated from the outside atmosphere. We agree with the Examiner’s analysis (Ans. 11 and 12) and find that Mizokawa’s chamber is a chamber capable of holding an isolated atmosphere that is isolated from an atmosphere exterior to the chamber as

called for in claims 1 and 10; claims 2-8 depending from claim 1 and claims 11-16 depending from claim 10.

Regarding claim 10, Appellants further contend that Mizokawa is silent as to disclosing a chamber having at least one of a minimum chamber width, or a minimum substrate transfer opening width for a given reach of the substrate transfer arm (Br. 15). In Mizokawa, the transfer arm (45, 45a) exchanges one wafer at a time by entering into a duct (16a) from the chamber (14) (para. [0035]). The width of the chamber (14) along with the reach of the transfer arm (45,45a) permits the transfer arm to perform the exchange. If the chamber were too wide or the transfer arm's reach were too short, the transfer arm would not be able to perform the exchange. Thus, the chamber must have a width, a minimum width, to coincide with the reach of the transfer arm to permit the transfer arm to perform the exchange. Therefore, we agree with the Examiner's analysis (Ans. 12) and find that Mizokawa discloses a chamber having at least one of a minimum chamber width, or a minimum substrate transfer opening width for a given reach of the substrate transfer arm as called for in claim 10. Therefore, in view of the above, we affirm the rejections of claims 1, 5-8, 10, 13, 15 and 16 under 35 U.S.C. § 102, and claims 2-4, 11, 12 and 14 under 35 U.S.C. § 103.

*Rejection of claims 9, 17-19 under 35 U.S.C. 102(e) as being as being anticipated by Mizokawa.*

Regarding claims 9 and 17, Appellants contend that Mizokawa fails to expressly disclose what drives the arm (45) to move up, down, left, right and rotate (Br. 14 and 16). The Examiner contends that Mizokawa's motor inherently powers robot (transfer arm) and thus Mizokawa discloses all of

1 the limitations in the claims (Ans. 12 and 13). We agree with Appellants  
2 and find that as Mizokawa is silent as to how the arm (45) is driven, it is  
3 speculative at best as to what actually provides the power to drive the arm.  
4 Accordingly, we conclude that the Examiner erred in rejecting claims 9 and  
5 17, and claims 18 and 19 depending from claim 17 over Mizokawa. We  
6 reverse the rejection of claims 9 and 17-19 under 35 U.S.C. § 102 thereof.

7  
8 *Rejection of claims 20, 22-38 under 35 U.S.C. 102(e) as being as being*  
9 *anticipated by Mizokawa; and claim 21 under 35 U.S.C. § 103(a) as being*  
10 *unpatentable over Mizokawa in view of Tepman.*  
11

12 Regarding claims 20, 22, 28, 30 and 31; Appellants contend that  
13 Mizokawa does not disclose another chamber communicably connected to  
14 the first chamber via a closable opening of the first chamber, wherein the  
15 opening is configured to enable the vehicle to transit between the first  
16 chamber and the other chamber through the opening (Br. 16-18). While the  
17 Examiner contends that Mizokawa discloses a first chamber (14) and  
18 another chamber (A-D) (Ans. 5), we do not find any disclosure in Mizokawa  
19 that states that the vehicle (12) goes through a closable opening between  
20 chambers (14) and (A-D) to transit into the chamber (A-D) as called for in  
21 claim 20. Therefore, we agree with Appellants and conclude that the  
22 Examiner erred in rejecting claims 20, 22, 28, 30 and 31, and claims 23-27,  
23 29 and 32-38 depending therefrom over Mizokawa, and claim 21 over  
24 Mizokawa in view of Tepman. Therefore, we reverse the rejection of claims  
25 20, 22-38 under 35 U.S.C. § 102, and claim 21 under 35 U.S.C. § 103.

*Rejection of claims 40-42 under 35 U.S.C. 102(e) as being as being anticipated by Mizokawa.*

Regarding claim 40, Appellants contend that Mizokawa does not disclose a first vehicle that extends across the chamber from proximate one wall to proximate another wall, as neither of the mobile elements (12AM) and (12NZ) are wide enough to extend across the chamber (fig. 9) (Br. 20). We agree with Appellants and find that the Mizokawa figure 9 embodiment referenced by the Examiner (Ans. 7, 13 and 14) does not disclose a first vehicle that extends across the chamber from proximate one wall to proximate another wall as called for in claim 40. Therefore, we conclude that the Examiner erred in rejecting claims 40-42 over Mizokawa and we reverse the rejection under 35 U.S.C. § 102 thereof.

#### CONCLUSION OF LAW

We conclude that the Appellants have not shown that the Examiner erred in rejecting claim 16 under 35 U.S.C. § 112; claims 1, 5-8, 10, 13, 15 and 16 under 35 U.S.C. § 102(e) as being anticipated by Mizokawa; claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Mizokawa in view of Harada; claims 11, 12 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Mizokawa in view of Tepman. We conclude that the Appellants have shown that the Examiner erred in rejecting claims 1, 10 and 14 under 35 U.S.C. § 112; claims 9, 17-20, 22-38 and 40-42 under 35 U.S.C. § 102(e) as being anticipated by Mizokawa; and claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Mizokawa in view of Tepman.



DECISION

The decision of the Examiner to reject claim 16 under 35 U.S.C. § 112 is affirmed. The decision of the Examiner to reject claims 1, 5-8, 10, 13, 15 and 16 over Mizokawa is affirmed. The decision of the Examiner to reject claims 2-4 over Mizokawa in view of Harada is affirmed. The decision of the Examiner to reject claims 11, 12 and 14 over Mizokawa in view of Tepman is affirmed. The decision of the Examiner to reject claims 1, 10 and 14 under 35 U.S.C. § 112 is reversed. The decision of the Examiner to reject claims 9, 17-20, 22-38 and 40-42 over Mizokawa is reversed. The decision of the Examiner to reject claim 21 over Mizokawa in view of Tepman is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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10 PERMAN & GREEN  
11 425 POST ROAD  
12 FAIRFIELD CT 06824